

Preaward Compliance Review Report for All Applicants and Recipients Requesting EPA Financial Assistance

Note: Read Instructions before completing form.

I. A. Applicant/Recipient (Name, Address, City, State, Zip Code)

Name: Hillsborough County Metropolitan Planning Organization
Address: 601 E. Kennedy Blvd.
City: Tampa
State: FL: Florida Zip Code: 33602-4932

B. DUNS No. 069672137

II. Is the applicant currently receiving EPA Assistance? ☐ Yes ☒ No

III. List all civil rights lawsuits and administrative complaints pending against the applicant/recipient that allege discrimination based on race, color, national origin, sex, age, or disability. (Do not include employment complaints not covered by 40 C.F.R. Parts 5 and 7.)

None

IV. List all civil rights lawsuits and administrative complaints decided against the applicant/recipient within the last year that allege discrimination based on race, color, national origin, sex, age, or disability and enclose a copy of all decisions. Please describe all corrective actions taken. (Do not include employment complaints not covered by 40 C.F.R. Parts 5 and 7.)

None

V. List all civil rights compliance reviews of the applicant/recipient conducted by any agency within the last two years and enclose a copy of the review and any decisions, orders, or agreements based on the review. Please describe any corrective action taken. (40 C.F.R. § 7.80(c)(3))

None

VI. Is the applicant requesting EPA assistance for new construction? If no, proceed to VII; if yes, answer (a) and/or (b) below.

☐ Yes ☒ No

a. If the grant is for new construction, will all new facilities or alterations to existing facilities be designed and constructed to be readily accessible to and usable by persons with disabilities? If yes, proceed to VII; if no, proceed to VI(b).

☐ Yes ☐ No

b. If the grant is for new construction and the new facilities or alterations to existing facilities will not be readily accessible to and usable by persons with disabilities, explain how a regulatory exception (40 C.F.R. 7.70) applies.

VII. Does the applicant/recipient provide initial and continuing notice that it does not discriminate on the basis of race, color, national origin, sex, age, or disability in its program or activities? (40 C.F.R. 5.140 and 7.95)

☒ Yes ☐ No

a. Do the methods of notice accommodate those with impaired vision or hearing?

☒ Yes ☐ No

b. Is the notice posted in a prominent place in the applicant's offices or facilities or, for education programs and activities, in appropriate periodicals and other written communications?

☒ Yes ☐ No

c. Does the notice identify a designated civil rights coordinator?

☒ Yes ☐ No

VIII. Does the applicant/recipient maintain demographic data on the race, color, national origin, sex, age, or handicap of the population it serves? (40 C.F.R. 7.85(a))

☒ Yes ☐ No

IX. Does the applicant/recipient have a policy/procedure for providing access to services for persons with limited English proficiency? (40 C.F.R. Part 7, E.O. 13166)

☒ Yes ☐ No

- X. If the applicant is an education program or activity, or has 15 or more employees, has it designated an employee to coordinate its compliance with 40 C.F.R. Parts 5 and 7? Provide the name, title, position, mailing address, e-mail address, fax number, and telephone number of the designated coordinator.**

Joshua Barber, Title VI/Nondiscrimination Coordinator, 601 East Kennedy Blvd., 18th floor, Tampa, FL 33602
Barberj@plancom.org 813-576-2313

- XI. If the applicant is an education program or activity, or has 15 or more employees, has it adopted grievance procedures that assure the prompt and fair resolution of complaints that allege a violation of 40 C.F.R. Parts 5 and 7? Provide a legal citation or Internet Address for, or a copy of, the procedures.**

<https://planhillsborough.org/title-vi-and-accessibility/>

For the Applicant/Recipient

I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law. I assure that I will fully comply with all applicable civil rights statutes and EPA regulations.

A. Signature of Authorized Official

Amber Simmons

B. Title of Authorized Official

Executive Director

C. Date

03/24/2022

For the U.S. Environmental Protection Agency

I have reviewed the information provided by the applicant/recipient and hereby certify that the applicant/recipient has submitted all preaward compliance information required by 40 C.F.R. Parts 5 and 7; that based on the information submitted, this application satisfies the preaward provisions of 40 C.F.R. Parts 5 and 7; and that the applicant has given assurance that it will fully comply with all applicable civil rights statutes and EPA regulations.

A. *Signature of Authorized EPA Official

B. Title of Authorized Official

C. Date

*** See Instructions**

Instructions for EPA FORM 4700-4 (Rev. 06/2014)

General. Recipients of Federal financial assistance from the U.S. Environmental Protection Agency must comply with the following statutes and regulations.

Title VI of the Civil Rights Acts of 1964 provides that no person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance. The Act goes on to explain that the statute shall not be construed to authorize action with respect to any employment practice of any employer, employment agency, or labor organization (except where the primary objective of the Federal financial assistance is to provide employment). Section 13 of the 1972 Amendments to the Federal Water Pollution Control Act provides that no person in the United States shall on the ground of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under the Federal Water Pollution Control Act, as amended. Employment discrimination on the basis of sex is prohibited in all such programs or activities. Section 504 of the Rehabilitation Act of 1973 provides that no otherwise qualified individual with a disability in the United States shall solely by reason of disability be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance. Employment discrimination on the basis of disability is prohibited in all such programs or activities. The Age Discrimination Act of 1975 provides that no person on the basis of age shall be excluded from participation under any program or activity receiving Federal financial assistance. Employment discrimination is not covered. Age discrimination in employment is prohibited by the Age Discrimination in Employment Act administered by the Equal Employment Opportunity Commission. Title IX of the Education Amendments of 1972 provides that no person in the United States on the basis of sex shall be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance. Employment discrimination on the basis of sex is prohibited in all such education programs or activities. Note: an education program or activity is not limited to only those conducted by a formal institution. 40 C.F.R. Part 5 implements Title IX of the Education Amendments of 1972. 40 C.F.R. Part 7 implements Title VI of the Civil Rights Act of 1964, Section 13 of the 1972 Amendments to the Federal Water Pollution Control Act, and Section 504 of The Rehabilitation Act of 1973. The Executive Order 13166 (E.O. 13166) entitled; "Improving Access to Services for Persons with Limited English Proficiency" requires Federal agencies work to ensure that recipients of Federal financial assistance provide meaningful access to their LEP applicants and beneficiaries.

Items "Applicant" means any entity that files an application or unsolicited proposal or otherwise requests EPA assistance. 40 C.F.R. §§ 5.105, 7.25. "Recipient" means any entity, other than applicant, which will actually receive EPA assistance. 40 C.F.R. §§ 5.105, 7.25. "Civil rights lawsuits and administrative complaints" means any lawsuit or administrative complaint alleging discrimination on the basis of race, color, national origin, sex, age, or disability pending or decided against the applicant and/or entity which actually benefits from the grant, but excluding employment complaints not covered by 40 C.F.R. Parts 5 and 7. For example, if a city is the named applicant but the grant will actually benefit the Department of Sewage, civil rights lawsuits involving both the city and the Department of Sewage should be listed. "Civil rights compliance review" means any review assessing the applicant's and/or recipient's compliance with laws prohibiting discrimination on the basis of race, color, national origin, sex, age, or disability. Submit this form with the original and required copies of applications, requests for extensions, requests for increase of funds, etc. Updates of information are all that are required after the initial application submission. If any item is not relevant to the project for which assistance is requested, write "NA" for "Not Applicable." In the event applicant is uncertain about how to answer any questions, EPA program officials should be contacted for clarification. * Note: Signature appears in the Approval Section of the EPA Comprehensive Administrative Review For Grants/Cooperative Agreements & Continuation/Supplemental Awards form.

Other Attachment File(s)

* Mandatory Other Attachment Filename:

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EPA KEY CONTACTS FORM

OMB Number: 2030-0020
Expiration Date: 06/30/2024

Authorized Representative: *Original awards and amendments will be sent to this individual for review and acceptance, unless otherwise indicated.*

Name:	Prefix:	<input type="text"/>	First Name:	<input type="text" value="Beth"/>	Middle Name:	<input type="text"/>
	Last Name:	<input type="text" value="Alden"/>			Suffix:	<input type="text"/>
Title:	<input type="text" value="Executive Director"/>					
Complete Address:						
Street1:	<input type="text" value="601 E. Kennedy Blvd."/>					
Street2:	<input type="text" value="18th Floor"/>					
City:	<input type="text" value="Tampa"/>	State:	<input type="text" value="FL: Florida"/>			
Zip / Postal Code:	<input type="text" value="33602"/>	Country:	<input type="text" value="USA: UNITED STATES"/>			
Phone Number:	<input type="text" value="813-272-5940"/>			Fax Number:	<input type="text"/>	
E-mail Address:	<input type="text" value="aldenb@plancom.org"/>					

Payee: *Individual authorized to accept payments.*

Name:	Prefix:	<input type="text"/>	First Name:	<input type="text" value="Beth"/>	Middle Name:	<input type="text"/>
	Last Name:	<input type="text" value="Alden"/>			Suffix:	<input type="text"/>
Title:	<input type="text" value="Executive Director"/>					
Complete Address:						
Street1:	<input type="text" value="601 E. Kennedy Blvd."/>					
Street2:	<input type="text" value="18th Floor"/>					
City:	<input type="text" value="Tampa"/>	State:	<input type="text" value="FL: Florida"/>			
Zip / Postal Code:	<input type="text" value="33602"/>	Country:	<input type="text" value="USA: UNITED STATES"/>			
Phone Number:	<input type="text" value="813-272-5940"/>			Fax Number:	<input type="text"/>	
E-mail Address:	<input type="text" value="aldenb@plancom.org"/>					

Administrative Contact: *Individual from Sponsored Programs Office to contact concerning administrative matters (i.e., indirect cost rate computation, rebudgeting requests etc).*

Name:	Prefix:	<input type="text"/>	First Name:	<input type="text" value="Amber"/>	Middle Name:	<input type="text"/>
	Last Name:	<input type="text" value="Simmons"/>			Suffix:	<input type="text"/>
Title:	<input type="text" value="Grants and Budget Coordinator"/>					
Complete Address:						
Street1:	<input type="text" value="601 E. Kennedy Blvd."/>					
Street2:	<input type="text" value="18th Floor"/>					
City:	<input type="text" value="Tampa"/>	State:	<input type="text" value="FL: Florida"/>			
Zip / Postal Code:	<input type="text" value="33602"/>	Country:	<input type="text" value="USA: UNITED STATES"/>			
Phone Number:	<input type="text" value="813-547-3379"/>			Fax Number:	<input type="text"/>	
E-mail Address:	<input type="text" value="simmonsa@plancom.org"/>					

EPA KEY CONTACTS FORM

Project Manager: *Individual responsible for the technical completion of the proposed work.*

Name: **Prefix:** **First Name:** **Middle Name:**

Last Name: **Suffix:**

Title:

Complete Address:

Street1:

Street2:

City:

State:

Zip / Postal Code:

Country:

Phone Number:

Fax Number:

E-mail Address:

BUDGET INFORMATION - Non-Construction Programs

OMB Number: 4040-0006
Expiration Date: 02/28/2022

SECTION A - BUDGET SUMMARY

Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. Surveys, Studies, Research, Investigations, Demonstrations, and Special Purpose Activities Relating to the Clean Air Act	66.034	\$	\$	389,875.00	\$	389,875.00
2.						
3.						
4.						
5. Totals		\$	\$	389,875.00	\$	389,875.00

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SECTION B - BUDGET CATEGORIES

6. Object Class Categories	GRANT PROGRAM, FUNCTION OR ACTIVITY				Total (5)
	(1) Surveys, Studies, Research, Investigations, Demonstrations, and Special Purpose Activities Relating to the Clean Air Act	(2)	(3)	(4)	
a. Personnel	\$ 38,818.00	\$	\$	\$	\$ 38,818.00
b. Fringe Benefits	13,198.00				13,198.00
c. Travel	8,377.00				8,377.00
d. Equipment	0.00				0.00
e. Supplies	34,100.00				34,100.00
f. Contractual	50,000.00				50,000.00
g. Construction					
h. Other	241,500.00				241,500.00
i. Total Direct Charges (sum of 6a-6h)	385,993.00				\$ 385,993.00
j. Indirect Charges	3,882.00				\$ 3,882.00
k. TOTALS (sum of 6i and 6j)	\$ 389,875.00	\$	\$	\$	\$ 389,875.00
7. Program Income	\$	\$	\$	\$	\$

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SECTION C - NON-FEDERAL RESOURCES					
(a) Grant Program		(b) Applicant	(c) State	(d) Other Sources	(e)TOTALS
8.	Surveys, Studies, Research, Investigations, Demonstrations, and Special Purpose Activities Relating to the Clean Air Act	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
9.					
10.					
11.					
12. TOTAL (sum of lines 8-11)		\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00

SECTION D - FORECASTED CASH NEEDS					
	Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
13. Federal	\$ 166,363.00	\$ 91,116.00	\$ 25,060.00	\$ 25,093.00	\$ 25,094.00
14. Non-Federal	\$				
15. TOTAL (sum of lines 13 and 14)	\$ 166,363.00	\$ 91,116.00	\$ 25,060.00	\$ 25,093.00	\$ 25,094.00

SECTION E - BUDGET ESTIMATES OF FEDERAL FUNDS NEEDED FOR BALANCE OF THE PROJECT					
(a) Grant Program		FUTURE FUNDING PERIODS (YEARS)			
		(b)First	(c) Second	(d) Third	(e) Fourth
16.	Surveys, Studies, Research, Investigations, Demonstrations, and Special Purpose Activities Relating to the Clean Air Act	\$ 166,363.00	\$ 111,072.00	\$ 112,440.00	\$
17.					
18.					
19.					
20. TOTAL (sum of lines 16 - 19)		\$ 166,363.00	\$ 111,072.00	\$ 112,440.00	\$

SECTION F - OTHER BUDGET INFORMATION	
21. Direct Charges: \$385993.	22. Indirect Charges: \$3882.
23. Remarks:	

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Project Narrative File(s)

* **Mandatory Project Narrative File Filename:**

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To add more Project Narrative File attachments, please use the attachment buttons below.

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Application for Federal Assistance SF-424

* 1. Type of Submission:

- ☐ Preapplication
☒ Application
☐ Changed/Corrected Application

* 2. Type of Application:

- ☒ New
☐ Continuation
☐ Revision

* If Revision, select appropriate letter(s):

* Other (Specify):

* 3. Date Received:

03/24/2022

4. Applicant Identifier:

5a. Federal Entity Identifier:

N/A

5b. Federal Award Identifier:

State Use Only:

6. Date Received by State:

7. State Application Identifier:

8. APPLICANT INFORMATION:

* a. Legal Name: Hillsborough County Metropolitan Planning Organization

* b. Employer/Taxpayer Identification Number (EIN/TIN):

50-026-1001

* c. Organizational DUNS:

0696721370000

d. Address:

* Street1: 601 E. Kennedy Blvd.

Street2: 18th Floor

* City: Tampa

County/Parish: Hillsborough

* State: FL: Florida

Province:

* Country: USA: UNITED STATES

* Zip / Postal Code: 33602-4932

e. Organizational Unit:

Department Name:

Division Name:

f. Name and contact information of person to be contacted on matters involving this application:

Prefix: * First Name: Amber

Middle Name:

* Last Name: Simmons

Suffix:

Title: Grants and Budget Coordinator

Organizational Affiliation:

* Telephone Number: 813-547-3379

Fax Number:

* Email: simmons@plancom.org

Application for Federal Assistance SF-424

* 9. Type of Applicant 1: Select Applicant Type:

X: Other (specify)

Type of Applicant 2: Select Applicant Type:

Type of Applicant 3: Select Applicant Type:

* Other (specify):

MPO

* 10. Name of Federal Agency:

Environmental Protection Agency

11. Catalog of Federal Domestic Assistance Number:

66.034

CFDA Title:

Surveys, Studies, Research, Investigations, Demonstrations, and Special Purpose Activities
Relating to the Clean Air Act

* 12. Funding Opportunity Number:

EPA-OAR-OAQPS-22-01

* Title:

Enhanced Air Quality Monitoring for Communities

13. Competition Identification Number:

Title:

14. Areas Affected by Project (Cities, Counties, States, etc.):

Add Attachment

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* 15. Descriptive Title of Applicant's Project:

Air Quality Monitoring for Disadvantaged Communities Along I-275/I-4 Corridor

Attach supporting documents as specified in agency instructions.

Add Attachments

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View Attachments

Application for Federal Assistance SF-424**16. Congressional Districts Of:*** a. Applicant * b. Program/Project

Attach an additional list of Program/Project Congressional Districts if needed.

Add Attachment

Delete Attachment

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17. Proposed Project:* a. Start Date: * b. End Date: **18. Estimated Funding (\$):**

* a. Federal	<input type="text" value="389,875.00"/>
* b. Applicant	<input type="text" value="0.00"/>
* c. State	<input type="text" value="0.00"/>
* d. Local	<input type="text" value="0.00"/>
* e. Other	<input type="text" value="0.00"/>
* f. Program Income	<input type="text" value="0.00"/>
* g. TOTAL	<input type="text" value="389,875.00"/>

*** 19. Is Application Subject to Review By State Under Executive Order 12372 Process?**

- ☐ a. This application was made available to the State under the Executive Order 12372 Process for review on .
- ☐ b. Program is subject to E.O. 12372 but has not been selected by the State for review.
- ☒ c. Program is not covered by E.O. 12372.

*** 20. Is the Applicant Delinquent On Any Federal Debt? (If "Yes," provide explanation in attachment.)**☐ Yes ☒ No

If "Yes", provide explanation and attach

Add Attachment

Delete Attachment

View Attachment

21. *By signing this application, I certify (1) to the statements contained in the list of certifications and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances** and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 218, Section 1001)**

☒ ** I AGREE

** The list of certifications and assurances, or an internet site where you may obtain this list, is contained in the announcement or agency specific instructions.

Authorized Representative:

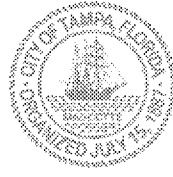
Prefix: * First Name:

Middle Name:

* Last Name:

Suffix:

* Title: * Telephone Number: Fax Number: * Email: * Signature of Authorized Representative: * Date Signed:



CITY OF TAMPA

— OFFICE OF THE MAYOR —

Jane Castor, Mayor

March 21, 2022

U.S. Environmental Protection Agency
1200 Pennsylvania Ave, N.W.
Washington, DC 20460

To the Members of the Review Panel,

On behalf of the City of Tampa, I am pleased to support the Hillsborough Transportation Planning Organization's request for funding from the Environmental Protection Agency's Enhanced Air Quality Monitoring for Communities grant program.

In 2020, I established the City's first Sustainability and Resilience Office and kicked off a Sustainability and Resilience Advisory Team to lead us in implementing our Tampa Resilience Roadmap and developing the Tampa Climate Action and Equity Plan with robust community engagement. Many of our current efforts aim to improve air quality in the City of Tampa, including through continuing to improve our tree canopy and working to transition our fleet of over 3,300 vehicles to become 100% electric.

The City of Tampa looks forward to participating in the proposed project, including through becoming a member of the Community Clean Air Coalition, hosting an air quality monitoring site and providing power and Wi-Fi, hosting an educational opportunity for constituents each year, publicizing the Clean Air Summit, assisting with community engagement, and helping to develop a guidebook for community monitoring site hosts.

Funding from the Enhanced Air Quality Monitoring for Communities Grant will support Hillsborough Transportation Planning Organization's efforts to enhance air quality monitoring and provide greater access to local communities. Thank you for your consideration of this worthy project.

Sincerely

Jane Castor

11 March 2022

Beth Alden, Executive Director
Hillsborough Transportation Organization
601 E. Kennedy Blvd. 18th Floor
Tampa, FL 33602

Dear Ms. Alden,

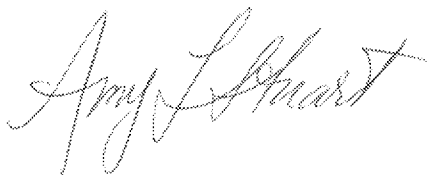
It is my pleasure to support the Enhanced Air Quality Monitoring for Communities grant application sought by the TPO. We have established a strong partnership on transportation related air quality issues with the TPO and this project aligns well with our continued work on air quality and environmental equity projects throughout the Tampa Bay region.

Our role throughout this project will be to:

- Collect and analyze data from the community monitors,
- Lead educational opportunities for community and school groups on air quality and equity issues related to transportation, monitor operation and maintenance, and data collection and analysis,
- Provide a speaker(s) for an annual summit/workshop for the communities involved as well as interested public,
- Help to develop a guidebook for community monitoring site hosts.
- Prepare an annual report on the data analysis for each of the three years of the project,
- Prepare an annual presentation for each of the three years of the project to the community groups and community leaders,

My team and I are excited to work with you on this worthwhile project.

Sincerely,



School Board
Lynn L. Gray, Chair
Stacy A. Hahn, Ph.D., Vice Chair
Nadia T. Combs
Karen Perez
Melissa Snively
Jessica Vaughn
Henry "Shake" Washington



Superintendent of Schools
Addison G. Davis

Principal
Monica Barber

Assistant Principal
Satonya Brascom

Booker T. Washington Elementary School
"Building Together We Excel"

Beth Alden, Executive Director
Hillsborough Transportation Organization
601 E. Kennedy Blvd. 18th Floor
Tampa, FL 33602

Dear Ms. Alden,

It is Booker T. Washington Elementary School's pleasure to support the Enhanced Air Quality Monitoring for Communities grant application sought by the TPO. We are excited about the opportunity it will provide our students to engage in real-life examples of how air quality can and does impact their community and encourage them to learn how the information can empower them to influence future planning decisions that may impact their neighborhoods.

We are looking forward to our students participating in activities that explore key disciplinary questions and build knowledge and skills with grade appropriate content. This investigation will expand on knowledge build through textual analysis by applying content in real world contexts.

Our role throughout this project will be:

- Participate as a member of the Community Clean Air Coalition
- Host an air quality monitoring site and provide power and Wi-Fi
- Teach students about air quality and monitoring as well as encourage and participate in data gathering
- Publicize the Clean Air Summit/workshop date
- Assist with community engagement
- Participate in curriculum development on air quality and monitoring in support of STEM education for children

Sincerely,

Monica Barber

Principal
Booker T. Washington Elementary
(813) 233-3720
Fax: 863-616-5802



COMMISSION

Mariella Smith CHAIR
Pat Kemp VICE-CHAIR
Harry Cohen
Ken Hagan
Gwendolyn "Gwen" W. Myers
Kimberly Overman
Stacy White



DIRECTORS

Janet D. Lorton EXECUTIVE DIRECTOR
Elaine S. DeLeeuw ADMIN DIVISION
Sam Elrabi, P.E. WATER DIVISION
Rick Muratti, Esq. LEGAL DEPT
Reginald Sanford, MPH AIR DIVISION
Steffanie L. Wickham WASTE DIVISION
Sterlin Woodard, P.E. WETLANDS DIVISION

Beth Alden, Executive Director
Hillsborough Transportation Organization
601 E. Kennedy Blvd. 18th Floor
Tampa, FL 33602

Dear Ms. Alden,

It is the Environmental Protection Commission of Hillsborough County's (EPC) pleasure to support the Enhanced Air Quality Monitoring for Communities grant application sought by the TPO. Our agencies have a strong partnership including representation on the TPO's Technical Advisory Committee. This project aligns well our current Low-Cost Air Quality Monitoring Pilot Project funded by the Federal Highway Administration and other air quality initiatives throughout the Tampa Bay region.

The Environmental Protection Commission of Hillsborough County (EPC) was established by the Florida State Legislature in 1967 to protect our natural resources, environment, and quality of life in Hillsborough County. The Agency oversee activities that may impact the air, water and soil for the protection and preservation of the public health, safety, and welfare. EPC maintains the largest ambient air monitoring network in the State and uses state of the art air quality sampling equipment to collect, measure and report air quality data to state and federal agencies. The Air Monitoring section operates over 30 air monitors for National and State air quality standard assessments, and numerous special purpose monitors which collect specific air quality data on pollution problems unique to Hillsborough County.

Our role throughout this project will be:

- Assist with set up and maintenance of the air quality sensor network at community-hosted sites
- Provide USF and the TPO access to the EPC Regulatory Monitoring Site to serve as a control site to test and calibrate community monitors
- Provide Wi-Fi service at the EPC Regulatory Monitoring Site for community monitors
- Provide technical assistance to the community network groups hosting the sensors
- Provide speaker(s) for the Annual Summit/Workshop on Air Quality for the designated area
- Assist with the development of youth education curriculum
- Collaborate and assist in the development of a guidebook for community monitoring site hosts.
- Coordinate public outreach with existing EPC outreach activities

We look forward to working with you on this worthwhile project.

Sincerely,

Reginald
Sanford, MPH

Digitally signed by
Reginald Sanford, MPH
Date: 2022.03.11
14:54:01 -05'00'

Reginald Sanford, MPH
Director
Air Division

Environmental Excellence in a Changing World

Environmental Protection Commission - Roger P. Stewart Center
3629 Queen Palm Drive, Tampa, FL 33619 - (813) 627-2600 - www.epchc.org

Quality Assurance & Quality Control

The Hillsborough Transportation Planning Organization (TPO) would like to confirm our intent to serve as the lead applicant the EPA Enhanced Air Quality Monitoring for Communities Grant. We have the experience and expertise to manage a quality assurance system for this potential agreement. The TPO is a transportation policy-making board mandated by federal and state law and directly responsible for making sure federal and state dollars spent on existing and future transportation projects and programs are based on a continuing, cooperative, and comprehensive transportation planning process. The TPO's work program is primarily supported by Federal Highway Administration (FHWA), Federal Transit Administration, the FL Commission for the Transportation Disadvantaged. The TPO is annually certified to assure compliance with federal and state reporting requirements and has demonstrated continuous compliance under the current Executive Director for over seven years.

Members of the project team from the Hillsborough Transportation Planning Organization (TPO), the Environmental Protection Commission, the University of South Florida (USF), and the Tampa Heights Junior Civic Association have demonstrated expertise managing, planning, technical and community-based projects.

Hillsborough Transportation Planning Organization (TPO)

Allison Yeh, AICP the TPO Assistant Executive Director will serve as overall project manager and manage overall planning, reporting, and contractual obligations. She has over 17 years of experience in land use and transportation and is an AICP Certified and LEED Accredited professional. With her team she oversees the TPO's work program and assures compliance for the TPO's FHWA, FTA, and State Transportation Disadvantaged funding. Recently, she has also managed two FHWA discretionary grants from the FHWA's Sustainable Transportation and Resilience Team pilot projects to assess the vulnerability of the surface transportation system to extreme weather in the Tampa Bay Area which currently serves as national case studies for FHWA's Vulnerability Assessment and Adaptation Framework.

Hillsborough Environmental Protection Commission (EPC)

Jason Waters, P.E. is the EPC Air Monitoring Section Chief and manages the largest local monitoring network in the state to measure the air quality in Hillsborough County to ensure we are in attainment of the National Ambient Air Quality Standards. The Section also oversees special project monitoring sites to address air pollution concerns specific to the Tampa Bay region. EPC will be coordinating with USF researchers to calibrate and compare data from the regulatory monitors with the air quality monitors.

Michelle Jenkins, AICP is a Senior Environmental Scientist for the Air Division at the Environmental Protection Commission of Hillsborough County with over 22 years of experience. Mrs. Jenkins serves as the Sustainability Coordinator and oversees the Air Division's grants, contracts, budget, and enforcement activities and will assist on data and quality control on the project.

University of South Florida (USF)

Amy Stuart, Ph.D. is a Professor USF Dept of Public Health and Environmental Engineering. Her work has focused on understanding air pollution and interactions between urban design, transportation, air quality, equity, and health. Dr. Stuart has experience in mechanistic modeling of fate, transport, and

exposure to air pollutants; field measurement of traffic-related air pollutants (TRAP); data integration and geospatial visualization; and analysis of disparities in exposure affecting marginalized groups. This has included research leading a National Science Foundation grant involving modeling and measurement of the impacts of urban design on air pollution exposures and inequality, and the implementation of a science museum exhibit for adolescents; co-leading a National Institutes of Health grant on exposures and impacts of TRAP; leading projects for a Department of Transportation University Transportation Center to investigate equity impacts of urban transportation infrastructure plans; and as a co-investigator on a Florida Department of Health contract to estimate maternal exposures to ambient air pollutants for a retrospective epidemiological study. She brings bring expertise and experience to contribute to the air pollution measurement, environmental data analysis, environmental inequality, and community science education aspects of this project.

Tampa Heights Junior Civic Association (THJCA)

Lena Green Young is the founder and Board of Director for the THJCA. She is a former legislative aid community leader and voice for the residents, children, and businesses in the historically underserved community of Tampa Heights and other communities of concern in Hillsborough County. Naya Young, THJCA Executive Director has holds degrees communications, public policy, and is certified in non-profit management. Tampa Heights Junior Civic Association (THJCA) was created in 1995 by residents and was an outgrowth of Tampa Heights Civic Association that was established over 42 years ago. It was intended to ensure that youth and children were given opportunities for civic engagement, leadership, and community involvement and to prepare them to assume such roles in their own worlds. Thousands of youths, families, individuals have participated over the years and THJCA has led many projects on transportation and representing equitable decision for neighborhoods, community gardens and food access. THJCA served as the first community organization for the establishment of the TPO's Future Leaders in Planning (FLIP) Junior to introduce transportation and land use careers to younger students. The program is ongoing and has been running successfully for three years. The air quality monitoring projects helps the THJCA expand their focus to introduce STEM careers to children in the community. THJCA works with the University of Tampa and University of South Florida to coordinate and engage thousands of university student volunteers and interns, teachers/professors and administrators through their Community Partnership Offices to 1) work in the community to gain on-the-ground experiences, 2) get introduced to a population that they may have never worked with in the past, 3) serve as inspiration to THJCA's youth to encourage them to attend higher education institutions 4) introduce students to their new community and 5) participate in community advocacy, conduct surveys/focus groups, join community cleanups, work in the gardens and assist with social events and festivals.



Tampa Heights Junior Civic Association

2005 N. Lamar Ave., Tampa, FL 33602 Phone: (813) 559-1768

Websites: www.thjca.org & www.thjcaevents.com Email: tampahighlightsjca@thjca.org

Tampa Heights Junior Civic Association Community Consultant

Beth Alden, Executive Director
Hillsborough Transportation Organization
601 E. Kennedy Blvd. 18th Floor
Tampa, FL 33602

Dear Ms. Alden,

It is the Tampa Heights Junior Civic Association pleasure to support the Enhanced Air Quality Monitoring for Communities grant application sought by the TPO. Our agencies have a strong partnership, and this project will help engage the community and empower them to influence future planning decisions that may impact their neighborhoods.

Tampa Heights Junior Civic Association is a 501(c)3 nonprofit organization dedicated to serving at-risk youth in Tampa Bay and throughout Hillsborough County. Additionally, THJCA provides leadership in other community projects including transportation, health and community gardening. Our Board Chair is the co-founder of the Green Artery which is a 20-neighborhood greenway initiative and Co-chair of the coalition of community gardens – Tampa Bay. Many of those to whom we provide services live in high pollutant that are focused in this grant. It would be a great opportunity to participate in administering this grant.

Our role throughout this project will be:

- Assist with Clean Air Summit/workshop (for 3 years), including arranging facility and program/speakers
- Recruit a minimum of 16 network groups to host distributed community monitor stations within the first year
- Assist with development for guidebook for community monitoring site hosts
- Regional Community Outreach Host and Annual Summit(s)
- Assist with curriculum development & apply to community planning events
- Engage youth in air quality monitoring to promote careers in STEM field.

We look forward to working with you on this worthwhile project.

Sincerely,

Executive Director

Board of Directors

Lena Young Green
Chair of the Board

Natalie Jackson, Board

of Directors Secretary
Hills. County School

District Teacher
Director, Kumbha

Drummers & Dancers

Michael Dove

Processing Engineer,
S.P. Credit Union

Owen Young

Area Superintendent,
District IV Hillsborough

County School District

John Tannison,
Vice Chair

Atelier Architecture,
Engineering &

Construction Inc.

Alex Fiol
Attorney, Fiol Law

Group

Reva Iman

Robles Park Village
Resident Association

/Council, President
Kevin M. Lee

Author
Antonio Hyman

Hyman Healthcare
Services

Keith Sedra
New Restaurant

Developer

Executive Director:
Naya Young

CONSOLIDATED RESUME FOR GRANT

Allison Yeh, AICP, MUP, LEED Green Associate
813-582-7351 yeha@plancom.org

EDUCATION/CERTIFICATIONS

University of Michigan, Ann Arbor, MI

- Master of Urban Planning
- Certificate in Intelligent Vehicle Highway Systems
(Joint Certificate with the Dept of Electrical Engineering and Urban Planning Program)
- Bachelor of Arts (Social Psychology and Asian Studies)
- American Institute of Certified Planners
- United State Green Building Council – LEED Green Associate

PROFESSIONAL PROFILE

Executive Planner, Hillsborough Metropolitan Planning Organization (Tampa, FL) (December 2014 – Present)

Lead on Agency Initiatives

- 2021-present USDOT-/FHWA/ Volpe Center Resiliency Disaster Recovery Tool Feedback Advisory Team and Pilot Project
- 2020-2021 NASA/ TBARTA/ MPO Vertiport Siting Tool Pilot Project
- 2019 - Regional Environmental Consultation Workshop – Led and coordinated with four MPOs in the West Central Coast of Florida to fulfil the requirement for the development of the 2045 Long Range Transportation Plan.
- 2018 - 2020 FHWA Resilience & Durability to Extreme Weather Pilot Program Project Manager.
- 2017 - American Planning Association - Sustaining Places Recognition Program for Comprehensive Plan for the cities of Tampa (Silver designation), Plant City (Silver designation), and Temple Terrace (Gold designation – only one awarded in 2017).
- MPO ETDM Coordinator – Florida FDOT Efficient Transportation Decision Making (ETDM). PD&E Environmental Review of projects to fulfil NEPA requirements.
- Hillsborough County Resiliency Plan Core Team - MPO representative.
- Hillsborough County Local Mitigation Working Group - MPO Representative.
- Hillsborough County's LEED Sustainable Cities and Communities Application Team - MPO Representative.
- Hillsborough County Evacuation Working Group (EWG) - MPO Representative.
- Serve as Advisory Board member for the USF Department of Urban Planning Program
- Sustainability Coordinator

MPO Project Manager

- Develop scope and budget and manage consultant transportation projects (e.g., Tampa Innovation District Circulator Study, and the HART Maintenance Facility Study).
- Presents project and research to MPO Boards, local jurisdictions, and the community.
- Supervises the MPO GIS Manager and oversee agency GIS workflow.
- Supervises the Budget and Grants Coordinator and oversees the TPO's Unified Planning Work program
- Supervises the Transportation Disadvantaged Coordinating Board Staff Liaison & Title VI Officer

- Supervises the University of South Florida Urban and Regional Planning Graduate Fellow

Unified Planning Work Program Manager

- Manage the MPO work program and budget.
- Coordinate transportation tasks for staff and consultant contracts.
- Coordinate funding applications for FHWA, FTA, Florida Commission for the Transportation Disadvantaged, and other external grants.

ADDITIONAL QUALIFICATIONS AND PRESENTATIONS

- US Green Building Council LEED Green Associate
- American Institute of Certified Planners (AICP) Certification
- University of Michigan Certificate in Intelligent Vehicle Highway Systems – Joint program with the Department of Electrical Engineering and the School of Urban Planning
- Leadership Hillsborough Program Graduate
- Familiar with databases, GIS platforms, transportation model, SLOSH model, & REMI
- National/state/local resilience presentations

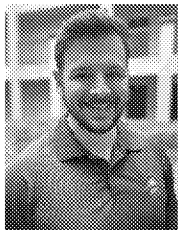
Community Air Monitoring Project - EPC Staff Bio's



Jason Waters is a Senior Environmental Manager for the Air Division at the Environmental Protection Commission of Hillsborough County. He began his professional career in industrial operations which provides valuable insight and perspective into working with the regulated community. Mr. Waters has over 25 years of air quality regulatory experience with two state environmental programs and the EPC. His body of work includes Ambient Air Monitoring and Modeling, Asbestos, Compliance, Permitting and Regulatory Assessment. Mr. Waters is the Air Monitoring Section Chief and manages the largest local monitoring network in the state to measure the air quality in Hillsborough County to ensure we are in attainment of the National Ambient Air Quality Standards. The Section also oversees special project monitoring sites to address air pollution concerns specific to the Tampa Bay region. Mr. Waters received his Bachelor of Science degree from Clemson University in Chemical Engineering and is a registered Professional Engineer.



Michelle Jenkins is a Senior Environmental Scientist for the Air Division at the Environmental Protection Commission of Hillsborough County. Mrs. Jenkins serves as the Sustainability Coordinator and oversees the Air Division's grants, contracts, budget and enforcement activities. She has worked at EPC for twenty-two years on a variety of air issues. In addition to her main responsibilities, her experience includes rule development, compliance, public outreach and event planning and promotion. Her sustainability efforts are focused on promoting sustainable government, reducing greenhouse gas emissions, fostering resiliency, and encouraging energy efficiency and alternative fuel technologies. Mrs. Jenkins works closely with Hillsborough County government and other environmental organization partners in the Tampa Bay area to leverage resources and build relationships that the goals of creating a sustainable community and environment for the future. Mrs. Jenkins has a Bachelor of Science degree from the University of South Florida in Environmental Science and Policy.



Cody Winter received his Bachelor of Science in Environmental Science from Florida State University with a special focus in Geology and Geography. After graduating, Mr. Winter received his Master of Science in Environmental Science and Policy from the University of South Florida with a focus in Urban Landscapes. During his time at USF, Mr. Winter studied the urban forest and completed his thesis entitled "Perceptions Affecting Tree Valuation." Additionally, Mr. Winter is credited as a coauthor on an article entitled "Urban trees, house price, and redevelopment pressure in Tampa, Florida." Since graduating from USF in 2017, Mr. Winter has been working with the Environmental Protection Commission in various capacities in both the Waste and Air Divisions including: Air Monitoring Section, Grants and Contracts, Enforcement and Sustainability, Public Outreach and many special projects that promote community health, clean air and environmental protection in Hillsborough County.

Elizabeth Ehrreich Baker

EDUCATION

M.A. Urban and Regional Planning

University of South Florida
May 2023 (expected)
GPA 4.0/4.0

M.A. Anthropology

George Mason University
2014-2016
GPA 4.0/4.0

B.A. Anthropology, History Minor

George Mason University
Honors College
2010-2014
GPA 3.89/4.0

“

I am a pragmatic team player who contributes skills in a range of professional areas, with special emphasis on public engagement, project coordination, program development, research, analysis, and education. I am a strong communicator, both orally and in writing; learn and adapt quickly; and enjoy challenging work. As an innovative problem solver, I am results oriented and simultaneously demonstrate flexibility, creativity, and perceptiveness.

”

EXPERIENCE

Plan Hillsborough Transportation Planning Organization

USF Fellow

August 2021 - Present

- Primary project coordinator and contact for the Low-Cost Air Quality Monitoring Pilot Study.
- Leads and prepares meetings, presentations, and public engagement sessions with local, state, and federal partners, stakeholders, and Committees.
- Develops and maintains digital communications and outreach
- Conducts data analysis and entry, analyzes and researches transportation policies and programs, and updates written reports.
- Assists with grant applications

Hillsborough County Government

Senior Park Ranger

March 2019 - July 2021

Park Ranger

December 2018 - March 2019

- Managed parkland and daily operations at the park and helped manage one of the County's three sandbag distribution centers. Served as Manager on Duty. Supervised staff and volunteers. Provided customer service and resolved complex customer complaints and concerns escalated by staff.
- Developed and led interpretive programs. Developed and maintained relationships with partner organizations and volunteers. Served as a spokesperson for live and prerecorded televised news stories.
- Developed and updated Park Standard Operating Procedures. Evaluated and researched existing policies and helped update the Department Camping Policy.
- Established, maintained, and expanded relationships with volunteers, partner organizations, and county departments.

Fairfax County Park Authority

Naturalist/Interpreter

May 2018 - December 2018

Management Analyst II

October 2016 - June 2018

Kayaking Instructor

May 2016 - October 2017

- In support of a 4,000+ position organization, furthered and facilitated the agency mission by creating and analyzing agency-wide policies and standard operating procedures; researched, developed, implemented, and managed projects and plans to align practices with business needs; and improved efficiency.
- Established and managed relationships with politically appointed officials, the Director's leadership team, and partners (non-profit organizations, customers, volunteers, civic groups, and private industry) through public engagement.
- Analyzed state legislation and potential legal implications for the agency. Coordinated responses between the County's Legislative Committee, Board, Attorneys and internal agency reviewers.
- Planned, designed, researched, and conducted interpretive programs, tours, and courses on natural and cultural history.

Elizabeth Ehrreich Baker

Fairfax Water

Assistant Network Administrator

2013 - 2016

- Collaborated with technicians, engineers, and vendors to establish and maintain necessary paths of communication to remotely control and monitor water production and distribution.
- Assisted Fairfax Water's SCADA team transition between types of communication links and conducted lab tests and research to explore alternative network communication designs, commands, and equipment for deployment.

George Mason University Honors College

Peer Research Mentor

2012

- Planned and presented recitation classes (20 students), writing and editing workshops, and colloquia (175+ students) for undergraduate students on research techniques, resources, writing procedures, and analytical skills.

The Institute on Religion and Public Policy

Research Fellow

2012

- Researched and authored reports on international religious persecution for use in the U.S. Immigration Court Cases and for publication by the organization.

AWARDS

Fairfax County Government Outstanding Performance Award

July 2018

"Lizzie helped achieve a challenging strategic goal of strengthening partnerships among diverse groups with passions for parks. She successfully managed divergent public comment sessions, organized and led a task force, and delivered dynamic and informative presentations. As a result, over a dozen Park's Friends Groups signed agreements with Fairfax County Park Authority."

Fairfax County Park Authority Trailblazer Team Award: Website Reconstruction Team

September 2018

Fairfax County Park Authority Director's Leadership Award: NRPA CAPRA Accreditation

October 2018

REFERENCES

Available on request.

CONSOLIDATED FOR GRANT

NAYA A. YOUNG

(813) 833-7028 | YOUNGNAYA1@GMAIL.COM

Objective

Success-driven, visionary, and highly committed professional equipped with a background in providing outstanding leadership. Expertise in quantitative and qualitative research, program coordination, management and development, communications, nonprofit management and strategic planning.

Experience

Executive Director, Tampa Heights Junior Civic Association January 2019 – Present

- Provide leadership and direction to ensure effective operation and delivery of programs within the organization and community
- Ensure an environment that facilitates the achievement of youth development outcomes
- Ensure the implementation of youth programs, services and activities that meet the requirements of all grants and support youth development outcomes
- Plans and oversees the organization's social ventures
- Oversee future planning and expansion of the organization and programs
- Ensure establishment of and adherence to policies and procedures
- Ensure proper and extensive facilities management
- Coordinate with other administrators to develop strategic alliances with community leaders and local officials. Develop collaborative partnerships with other youth serving organizations, members, parents, families, funders and community organizations

Research Assistant, Ronald W. Walters Leadership & Public Policy Center Feb 2016 – Aug 2018

- Worked on a federal grant from the Department of Justice COPS Office to explore strategies that encourage recruitment among diverse millennials for law enforcement positions titled *Engaging College Students in 21st Century Law Enforcement Project*.
- Managed logistical planning for focus groups on four college campuses
- Provided planning, administrative, and programmatic assistance
- Drafted and managed the recruitment process for focus group participants and facilitators
- Facilitated the development and implementation of projects and events related to grant work and the Ronald W. Walters Center
- Coordinated logistics for several conferences as well as a visit from the US Attorney General, Loretta Lynch
- Prepared conference report for distribution to stakeholders, University leadership and Justice Department grant managers
- Provided research and assisted in the completion of literature review

Research Assistant, National Coalition on Civic Participation May 2017 – Aug 2017

- Assisted in development of exit poll project with NCBCP as well as assisted with other projects
- Collected data for entry of exit poll surveys into SPSS
- Developed tables to be used for analysis of survey data
- Created infographics and supplemental materials based on exit poll findings
- Conducted literature searches and reviews on topics related to voter suppression
- Collaborated with colleagues to write final report for exit poll project

Presentations & Professional Development

Increasing Diversity in Policing and Building Trust Part 1 Convening October 2016
Washington, DC

NCOBPS National Conference of Black Political Scientists March 2017
San Diego, CA

- *Attendee & Presenter*
- Presented preliminary report from the Voter Protection Project exit poll data collected by Howard University Graduate Political Science Association in North Carolina and Ohio on election day.

Increasing Diversity in Policing and Building Trust Part 2 Convening April 2017
Washington, DC

International Association of Chiefs of Police (IACP) Conference October 2017
Philadelphia, Pennsylvania

- Panelists on *Millennials and Minorities: The Howard University Project on Recruitment and Retention*
- Presented observations on focus groups and convenings from perspective as a college student in the millennials age group

Addressing Gender Diversity in Law Enforcement Convening March 2018
Washington, DC

Education

University of Tampa, Tampa FL October 2021

- Nonprofit Management Certification

Howard University, Washington DC May 2018

- Master of Arts and Sciences in Political Science
- Major: Public Policy, International Relations

University of South Florida, Tampa Florida December 2014

- Bachelor of Communication
- Major: Culture and Media Studies

Amy L. Stuart

University of South Florida, 13201 Bruce B. Downs Blvd., MDC-56, Tampa, FL 33612

PHONE: [REDACTED] Ex. 6 Personal Privacy (PP) E-MAIL: als@usf.edu • WEB: www.eng.usf.edu/~als

PERSONAL STATEMENT

My work has focused on understanding air pollution and interactions between urban design, transportation, air quality, equity, and health. Specifically, I have experience in mechanistic modeling of fate, transport, and exposure to air pollutants; field measurement of traffic-related air pollutants (TRAP); data integration and geospatial visualization; and analysis of disparities in exposure affecting marginalized groups. This has included research leading a National Science Foundation grant involving modeling and measurement of the impacts of urban design on air pollution exposures and inequality, and the implementation of a science museum exhibit for adolescents; co-leading a National Institutes of Health grant on exposures and impacts of TRAP; leading projects for a Department of Transportation University Transportation Center to investigate equity impacts of urban transportation infrastructure plans; and as a co-investigator on a Florida Department of Health contract to estimate maternal exposures to ambient air pollutants for a retrospective epidemiological study. As such, I bring expertise and experience to contribute to the air pollution measurement, environmental data analysis, environmental inequality, and community science education aspects of this project.

ACADEMIC AND PROFESSIONAL POSITIONS

Full Professor <i>University of South Florida (USF), Tampa, FL</i> College of Public Health (primary); Dean: D. Petersen, Sc.D., M.H.S., C.P.H. Dept. of Civil & Environ. Engineering, College of Engineering (joint); Chair: M. Gunaratne, Ph.D., P.E.	Aug. 2017 – present
Associate Professor, USF	Aug. 2011 – Aug. 2017
Assistant Professor, USF	Jan. 2005 – Aug. 2011
Assistant Research Scientist and Graduate Faculty Dept. of Atmospheric Sciences, <i>Texas A&M University, College Station, TX</i>	Aug. 2003 – Nov. 2004
Science Fellow and Postdoctoral Researcher Ctr. International Security & Coop., and Dept. Geol. & Envir. Sci., <i>Stanford University, Stanford, CA</i>	Sept. 2002 – July 2003
Visiting Graduate Researcher Mesoscale and Microscale Meteorology, <i>National Center for Atmospheric Research, Boulder, CO</i>	June – Aug. 1998
Associate Environmental Consultant Air Sciences, <i>Environ Corporation, Emeryville, CA</i>	Sept. 1994 – Aug. 1996

EDUCATION

Ph.D. in Civil and Environmental Engineering <i>Stanford University, Stanford, CA</i>	2002
M.S. in Civil Engineering (Environmental Engineering and Science Program) <i>Stanford University, Stanford, CA</i>	1997
B.S. in Chemical Engineering <i>Stanford University, Stanford, CA</i>	1994

HONORS AND AWARDS

Sigma Xi, The Scientific Research Honor Society, Member	2019
National Science Foundation CAREER Grant Award	2008
Profiled in the Air and Waste Management Association Tampa Bay Section Newsletter	2007
US Environmental Protection Agency STAR Graduate Fellowship	1999-2002
United States Presidential Scholar	1989
National Merit Scholar	1989

RESEARCH AND SCHOLARSHIP

Refereed Journal Manuscript Publications (Selected examples related to this project)

- TK Kocak, S Gurram, RL Bertini, and AL Stuart. Impacts of a metropolitan-scale freeway expansion program on air pollution and equity. *Journal of Transport & Health*, 22: 101114, 2021.
- P Leandro-Reguillo and AL Stuart. Healthy urban environmental features for poverty resilience: the case of Detroit, USA. *International Journal of Environmental Research and Public Health*, 18: 6982, 2021.
- Y Guo, Z Chen, AL Stuart, X Li, Y Zhang. A systematic overview of transportation equity in terms of accessibility, traffic emissions, and safety outcomes: From conventional to emerging technologies. *Transportation Research Interdisciplinary Perspectives*, 4: 100091, 2020.
- S Gurram, AL Stuart, and AR Pinjari. Agent-based modeling to estimate exposures to urban air pollution from transportation: exposure disparities and impacts of high-resolution data. *Computers, Environment and Urban Systems*. 75: 22 –34, 2019.
- H Yu, and AL Stuart. Impacts of compact growth and electric vehicles on future air quality and urban exposures may be mixed. *Science of the Total Environment*, 576: 148 – 158, 2017.
- H Yu, and AL Stuart. Exposure and inequality for select urban air pollutants in the Tampa Bay area. *Science of the Total Environment* 551-552 (May): 474–83, 2016.
- N Good, A Mölter, C Ackerson, A Bachand, T Carpenter, ML Clark, KM Fedak, A Kayne, K Koehler, B Moore, C L'Orange, C Quinn, V Ugave, AL Stuart, JL Peel and J Volckens. The Fort Collins Commuter Study: Impact of Route Type and Transport Mode on Personal Exposure to Multiple Air Pollutants. *Journal of Exposure Science and Environmental Epidemiology*, 26: 397 - 404, 2016.
- M Dirgawati, R Barnes, AJ Wheeler, A Arnold, KA McCaul, AL Stuart, D Blake, A Hinwood, BB Yeap, and JS Heyworth. 2015. Development of Land Use Regression Models for Predicting Exposure to NO₂ and NO_x in Metropolitan Perth, Western Australia. *Environmental Modelling & Software* 74 (December): 258–67, 2015.
- S Gurram, AL Stuart, AJ Pinjari. Impacts of travel activity and urbanicity on exposures to ambient oxides of nitrogen and on exposure disparities. *Air Quality, Atmosphere & Health* 8: 97–114, 2015.
- H Yu, AL Stuart. Spatiotemporal distributions of ambient oxides of nitrogen, with implications for exposure inequality and urban design. *J. Air & Waste Management Assoc.*, 63(8): 943-55, 2013.
- AL Stuart and M Zeager. An inequality study of ambient nitrogen dioxide and traffic levels near elementary schools in the Tampa area. *Journal of Environmental Management*, 92:1923-1930, 2011.
- AL Stuart, S Mudhasakul, W Sriwatanapongse. The social distribution of neighborhood-scale air pollution and monitoring protection. *J. Air & Waste Management Assoc.*, 9:591-602, 2009.

Grants/Contracts as a Lead Investigator (Selected examples related to this project)

- A Stuart. Low-cost monitoring to reduce traffic-related air pollution exposures and inequality. Hillsborough County Transportation Planning Organization. \$50,000. Sept. 2021 – Aug. 2022.
- A Stuart, D. Martinez-Tyson, J. Beckstead, L. Grove. Pilot study and methods development on low-cost sensors and citizen science to reduce air pollution exposure inequality and empower vulnerable communities. Univ. of South Florida College of Public Health. \$35,046. Sept. 2021 – Aug 2022.
- X Li, Y Zhang, A Stuart. Automated vehicle access, mobility, and affordability for system users. WSP USA Inc / Federal Highway Administration. \$160,955. Nov. 2019 – Oct. 2021.
- A Stuart (PI) and R Bertini. Air pollution and equity impacts of the proposed Tampa Bay Next program from a Health in all Policies perspective. *Project under UTC: Center for Transportation, Environment, and Community Health (CTECH)*. U.S. Dept. of Transportation. \$60,531. Oct. 2018 – Oct. 2019.
- X Li, Y Zhang, A Stuart (project co-PI). Measuring the impact of emerging transportation technologies on community equity in economy, environment and public health. *Project under CTECH*. U.S. Dept. of Transportation. \$40,115. December 2017 – September 2018.
- A Stuart (PI) and F Mannering. Impacts of transit-oriented compact-growth on air pollutant concentrations and exposures in the Tampa region. *Project under CTECH*. U.S. Dept. of Transportation. \$45,860. November 2016 – November 2017.
- J Volckens, J Peel, A Stuart (one PI of three). The Commuter Exposure Study: linking exposure, source-receptor models, and health. *National Institute of Environmental Health Sciences*. \$2,023,000. January 2012 – October 2016.
- A Stuart (PI). CAREER: Multi-scale interactions of air pollution, urban growth, and equity – integrated research methods and informal science teaching. *CBET- Environmental Sustainability, National Science Foundation*. \$400,000. January 2009 – December 2014.

Yonghong Luo

University of South Florida, 13201 Bruce B. Downs Blvd., MDC-56, Tampa, FL 33612

PHONE: Ex. 6 Personal Privacy (PP) • E-MAIL: yonghong@usf.edu

PERSONAL STATEMENT

As a doctoral student at the College of Public Health, my research has focused on air pollution exposure, inequality, community engagement and empowerment for the environmental issues. I have experience in ambient air pollution monitoring, air pollutant concentration determination, laboratory chemical analytical methods, industrial environmental contaminant identification, and air pollution data analysis. Relevant courses I have taken at the University of South Florida include community air pollution, public health geographic information system, population assessment, structured programming and computational analysis, and transforming public practice. Thus far, I have been involved in proposals for three grants related to air pollution monitoring network establishment, traffic-related air pollution exposure and inequality, development of citizen science with low-cost monitors, for which I was responsible for the information collection, budget estimation, and the first-draft proposal writing. Currently, I am the project facilitator, under the guidance of Dr. Amy Stuart, on two funded projects involving the methods development on the use of low-cost monitors and citizen science to reduce air pollution exposure inequality and empower vulnerable communities.

WORK EXPERIENCE

Lecturer

Mar. 2018 – Jul. 2021

Southwestern Medical University, Luzhou, Sichuan, China

School of Basic Medical Sciences

Dept. of Physiology

Responsibility: teaching and scientific research, taught physiological experiment and participated in scientific research concerning metal toxicology.

Engineer

Oct. 2012 – Feb. 2018

Environmental Protection Agency, Luzhou, Sichuan, China

Environmental Monitoring Center Station

Dept. of on-site monitoring and Dept. of data analysis

Responsibility: Environment Monitoring, monitored water, air, sound and solid waste environmental contaminants, determined their concentrations using physical, chemical and/or biological approaches, processed data, and wrote monitoring reports.

Technician

Jan. 2012 – Oct. 2012

Luzhou Xinglu Water Affairs (Group) Co., Ltd., Luzhou, Sichuan, China

Water Quality Testing Laboratory

Responsibility: Water Quality Testing, monitored and analyzed drinking water to confirm the drinking water quality using chemical methods.

EDUCATION

M.S. in Hydrobiology

Nanjing Agriculture University, Nanjing, China

Important classes: Environmental Chemistry, Environmental Biology, Advanced Wastewater Treatment Engineering, Biochemistry.

B.S. in Aquaculture

Nanjing Agriculture University, Nanjing, China

Important classes: General Chemistry, Experimental Chemistry, Environmental Chemistry, Organic Chemistry, Immunology, Microbiology, Linear Algebra

PUBLICATION AND PROFESSIONAL PRESENTATION

Publication

Ying Li, Min Tang, Yonghong Luo, 2019, "Genomic Characterization of *Kerstersia gyiorum* SWMUKG01, an isolate from a patient with respiratory infection in China", PLOS ONE 14(4): e0214686.

Siwen Li, Xia Jiang, Yonghong Luo, 2019, "Sodium/calcium overload and Sirt1/Nrf2/OH-1 pathway are critical events in mercuric chloride-induced nephrotoxicity", Chemosphere 234(2019) 579-588.

Yonghong Luo, Zhengquan Hu, Lijuang Wu, 2017, "Analysis on Ionic Characteristics in Precipitation in LuZhou during 2011-2015", Sichuan Environment, v36, No. 173(05): 72-75.

Liping Qiu, Yonghong Luo, Jianhong Qu, 2014, "Effect of 1-Naphthol on Physiological Parameters of *Chlorella Vulgaris*", Agricultural Biotechnology, 3(4): 45-48,52.

Yonghong Luo, Chao Song, Jiazhang Jia, 2012, "Toxicology and environmental trends of Carbaryl, 1-naphthyl methylcarbamate", Jiangsu Agricultural Sciences, 2012,40(1) 316-318, 321.

Presentation

Identifying the Potential of Citizen Science with Low-Cost Sensors to Reduce Air Pollution Exposure Inequality. Conference: 2021 Graduate and Professional Research Symposium, Poster presentation, April 2021, Tampa/St. Petersburg FL

Low-cost Monitors and Citizen Science to Reduce Inequality in Exposures to Traffic-related Air Pollution. Conference: 2022 USF Health Research Day, Poster presentation, February, Tampa, FL.

AWARDS

A&WMA scholarship awarded by the Florida Air & Water management Association

Arun Kulkarni Memorial Endowed Fund

USF fellowship and scholarship

LuZhou Environmental Protection Agency Award for Excellent Staff

Co-written Environmental Quality Report between 2011 and 2015 was Awarded First Prize by Sichuan Environmental Protection Agency

Nanjing Agriculture University Award for Excellent graduate student

Manifest for Grant Application # GRANT13579726

Grant Application XML file (total 1):

1. GrantApplication.xml. (size 27703 bytes)

Forms Included in Zip File(total 6):

1. Form ProjectNarrativeAttachments_1_2-V1.2.pdf (size 16136 bytes)

2. Form SF424_3_0-V3.0.pdf (size 24090 bytes)

3. Form SF424A-V1.0.pdf (size 23306 bytes)

4. Form EPA4700_4_3_0-V3.0.pdf (size 22781 bytes)

5. Form OtherNarrativeAttachments_1_2-V1.2.pdf (size 15910 bytes)

6. Form EPA_KeyContacts_2_0-V2.0.pdf (size 37378 bytes)

Attachments Included in Zip File (total 8):

1. OtherNarrativeAttachments_1_2 OtherNarrativeAttachments_1_2-Attachments-1239-Community Consultant Letter of Support.PDF application/pdf (size 1080173 bytes)

2. OtherNarrativeAttachments_1_2 OtherNarrativeAttachments_1_2-Attachments-1240-Environmental Protection Commission Letter of Support.pdf application/pdf (size 445129 bytes)

3. OtherNarrativeAttachments_1_2 OtherNarrativeAttachments_1_2-Attachments-1241-USFLetterOfSupport.pdf application/pdf (size 208429 bytes)

4. OtherNarrativeAttachments_1_2 OtherNarrativeAttachments_1_2-Attachments-1236-Resumes and Key Personnel - Hillsborough App.pdf application/pdf (size 718370 bytes)

5. ProjectNarrativeAttachments_1_2 ProjectNarrativeAttachments_1_2-Attachments-1234-Hillsborough County TPO Project Narrative EPA-OAR-OAQPS-22-03-25.pdf application/pdf (size 516845 bytes)

6. OtherNarrativeAttachments_1_2 OtherNarrativeAttachments_1_2-Attachments-1237-BTWE Community Network Letter of Support.pdf application/pdf (size 173844 bytes)

7. OtherNarrativeAttachments_1_2 OtherNarrativeAttachments_1_2-Attachments-1235-Quality Assurance Statement - Attachment.pdf application/pdf (size 131248 bytes)

8. OtherNarrativeAttachments_1_2 OtherNarrativeAttachments_1_2-Attachments-1238-City of Tampa - Letter of Support.pdf application/pdf (size 116679 bytes)

Hillsborough County Transportation Planning Organization

Distributed Air Quality Monitoring for Disadvantaged Communities Along I-275/I-4 Corridor.

Applicant: Hillsborough County Metropolitan Planning Organization, dba Hillsborough Transportation Organization (TPO)

Address: 601 E. Kennedy Blvd. 18th Floor, Tampa, Florida 33602

Primary Contact: Beth Alden, 813-272-5940, aldenb@plancom.org

DUNS: 069672137

Set-Aside: No set-aside

Description of Applicant Organization: The Hillsborough County Transportation Planning Organization (TPO) is the designated body responsible for the urban transportation planning process for the Tampa Bay Transportation Management Area within Hillsborough County. Key ongoing activities that the TPO is involved with are the Long-Range Transportation Plans, Resiliency studies, Transportation Disadvantaged Service Plan, TPO Health Atlas, and establishing project priorities for the multiple leadership and planning groups within Hillsborough County.

Project Partners: Partner organizations for this project are **Environmental Protection Commission (EPC)** for Hillsborough County, Michelle Jenkins; **University of South Florida**, Dr. Amy Stuart; **Tampa Heights Junior Civic Association**, Naya Young

Project Location: The project will focus on communities of concern who have been disproportionately impacted by the development along the I-275 and I-4 corridors of Hillsborough County, Florida. The primary locations of this project will be in proximity of I-275 and I-4 and within the zip codes 33609, 33607, 33606, 33602, 33603, 33604, 33612, 33605, 33619, and 33610.

Air Pollutant Scope:

- Particulate matter (PM_{2.5})
- Nitrogen Dioxide (NO₂)
- Benzene

EPA Funding Requested	Total Project Cost
\$389,875	\$389,875

Project Period: July 2022 – June 2025

Project Description:

The project intends to create a grassroots community network, or distributed air quality monitoring network along I-275 and I-4 focusing on communities of concern to provide data-based information for future project planning. The project will measure known health-impacting air pollutants from vehicular traffic with the intent for community members and school children to learn, participate and help report about localized air quality. The goal is to assist the communities and the Transportation Planning Organization to develop future planning approaches that improve air quality near roadways and improve the equity outcomes of transportation decision making.

Section 1: Project Summary and Approach

A. Overall project

Low-income and communities of color often bear a disproportionate burden of health impacts from air pollution to climate change. It is important for these communities of concern to both understand the impacts of air quality and empower them to influence sustainable solutions to community air pollution. When the I-275 and I-4 highways were built, they had damaging impacts to the local neighborhoods. These communities had very little influence on how or what happened to the homes and future health of their neighborhoods.

The intent is to engage and empower community members and youth through community partnerships by creating a grassroots network of air quality monitoring stations to be known as the distributed air quality monitoring network. The monitors will gather, report, and publicize real-time localized air quality measurements. Through the partners the data will be analyzed, and they will provide educational opportunities, create youth interest in science, engage the community and share the importance of data-driven sustainable solutions for improving air quality in their neighborhoods.

Utilizing this network, a local coalition will be created within the typically underserved communities, with the long-term goal to empower the communities to utilize the data from the sites to shape and influence future transportation project decisions.

The project will focus on monitoring fine particulate matter (PM_{2.5}) and nitrogen dioxide (NO₂) at community sites along the I-275/I-4 corridor. Both PM_{2.5} and NO₂ are criteria air pollutants with National Ambient Air Quality Standards (NAAQS) reflective of their known cardiovascular and respiratory health impacts. Both are also monitored at regulatory sites. Nonetheless, their levels are expected to be higher near roadways due to traffic emissions, but monitoring networks are not dense enough to differentiate between neighborhoods. In addition, we plan to monitor benzene at some sites. Benzene is in the class of air pollutants called hazardous air pollutants, for which NAAQS has not been established and hence monitoring is less regular and sparser than for criteria pollutants. Benzene is strongly associated with traffic emissions and responsible for a substantial portion of cancer risk in the U.S.

This project intends to build upon a current [Low-Cost Air Quality Monitoring Pilot Study](#) sponsored by the TPO and in collaboration with the University of South Florida (USF), Hillsborough County Environmental Protection Commission (EPC), Federal Highway Administration (FHWA), and community organizations. The Pilot Study tested several low-cost monitors and studies air quality in communities disproportionately impacted by transportation related air pollution (TRAP). The study will establish community low-cost air quality monitoring sites to measure hazardous pollutants from vehicular traffic. The research findings will help inform methods for larger scale community monitoring stations.

Scope of work:

Aim 1: Establish a network of air pollution monitors in underserved neighborhoods near the I-275/I-4 corridor

Work with community partners to select sites

- Three types of monitoring sites with posted educational signage on air quality and health, transportation impacts, built environment design and how to access data

1. Micro-community engagement sites (~15-20 sites):
 - PurpleAirs to measure PM at community facilities and home Sites must have Wi-Fi and power available/accessible to monitor + funds for extra/replacement Purple Airs (3).
2. Central community engagement sites (~5 sites)
 - Clarity nodes to measure PM and NO₂, T, RH
3. EPC evaluation/calibration sites (2: Munro and Sydney)
 - 1 PurpleAir at each (2 total)
 - 1 Clarity at Munro
 - MOU for each type of site
 - Establish/install in stages: ~1/3 in year 1 and remainder in year 2
(This is generally suggested in the literature to improve outcomes)

Aim 2: Characterize concentrations of the target traffic-related air pollutants in these communities

- Collect data continuously
- Investigate and establish quality assurance and calibration methods and protocols
- Analyze summary statistics, trends, maps
- Analyze inequality (compare community exposure with regional exposures at Sydney)

Aim 3: Develop community capacity for civic engagement and empowerment on issues of air pollution and built environmental design

- Establish a Community Air Quality Coalition with quarterly meetings
- Establish in-neighborhood staff or community outreach and monitor maintenance
- Setup data sharing with community via PurpleAir and Clarity websites
- Training Workshops for the community and youth on
 - air pollution concepts and science
 - impact of transportation and planning
 - civic engagement
- Workshops to understand and interpret the monitoring data
 - Training on monitor maintenance (for network longevity)
- Work with K-12 teachers who will develop curriculum around monitoring to engage youth groups and partner agencies

B. Project Significance

Air pollution is a public health problem, contributing substantially to cardiovascular and respiratory diseases, adverse birth-outcomes, and early mortality. Urban air pollution from traffic-related sources is a concern, with growing evidence that historically underserved populations (including Black, Hispanic, and people with low incomes) are disproportionately exposed, thus more vulnerable, to associated health impacts. Within Hillsborough County, there's evidence from short-term measurement and modeling campaigns that indicate communities near the I-275/I-4 corridor comprised primarily of African American and lower-income households are disproportionately impacted by exposures to traffic-related air pollution.

One mechanism for mitigating these disparities and health impacts is effective urban and transportation planning. To accomplish this, high-resolution real-time air quality information, particularly in

underserved communities is needed to enable decision-making that reduces inequality in air pollution exposures. Current governmental monitoring networks provide high quality air pollution data, but they are too sparse to provide the local-scale information needed. In Hillsborough County, there is only one site for near-road monitoring.

All people are subject to potential health effects by these pollutants, yet at-risk populations are more likely to have health-related impacts from TRAP. At-risk people include pregnant women, anyone with heart and/or lung disease, diabetes, seniors, children and infants, and anyone doing physical activities. There are potential increased effects including asthma, premature birth and/or infant mortality, heart disease, respiratory illness, lung cancer, and premature death. Additionally, people who have been infected with COVID-19 have also shown lingering and potentially long-term respiratory challenges and been identified as an at-risk demographic.

Furthermore, people from underserved communities often mistrust government data and feel disempowered in public decision-making. Hence there is a need for community capacity building for communities to be involved in self-monitoring of air quality and interpretation of the data, to enable community members to effectively engage in decision making processes.

Over the last decade, air pollution monitors that incorporate lower-cost sensors have emerged as a tool to obtain high-resolution, real-time data for decision making. This project will allow Hillsborough County TPO to work with a coalition of partners to establish a distributed network of monitors in underserved communities along the corridor while building trust and community capacity to participate in the transportation planning processes.

Section 2: Community Involvement Community Partnership

A. Community Partnerships

Hillsborough TPO intends to work with community organizations to help engage the community who will guide and sustain the network of distributed air monitoring stations. Various community organizations with diverse focus areas, including but not limited to civic associations, schools, faith-based organizations, and environmental organizations, will help develop the network and assist with public engagement. Initially, the TPO will coordinate the community involvement, and the community will consult the TPO on community capacity building, network development, and public engagement via a coalition. Over the three-year project, the role of community coordination will transition from the TPO to a local community organization. We have outlined the following partnerships and defined their roles:

- Technical Advisory: Two primary partnerships will serve as scientific and technical advisors for the project to provide expertise on air quality, air monitoring, and public health impacts, the University of South Florida (USF) College of Public Health researchers and Hillsborough County's Environmental Protection Commission (EPC), Air Quality Division staff.
- Community Consultant: Tampa Heights Junior Civic Association will assist with community engagement, outreach activities, educational events and help develop the coalition.
- Educational Opportunity and Community engagement: We will partner with schools in proximity to the interstates, particularly schools with high rates of free and reduced lunch and students of color. Primary school teachers, working with our technical advisory partners, will develop a curriculum to provide students an opportunity to learn about air quality, the STEM field,

conducting research, and what transportation planning is and how to participate. Two schools participating in the existing pilot study expressed interest and will install monitors at their sites, Booker T Washington Elementary School, and Seminole Heights Elementary School.

- Existing partners: We will invite our existing partners, other interested organizations, and community members to join the Community Air Quality Coalition (the coalition) upon establishment. Our primary partner organizations along with these additional organizations have been involved with the pilot study and are interested in expanding the network:
 - Non-profit environmental organizations such as the Sierra Club,
 - Community Redevelopment Agencies, such as East Tampa CRA,
 - Faith-based organizations, such as New Mount Zion Missionary Baptist Church,
 - City of Tampa Government.

We will continue to grow partnerships with community organizations as we expand the community air monitoring network.

B. Community Engagement

The coalition in conjunction with the TPO will engage the public to create a distributed network of air quality monitoring stations in communities. The monitoring stations will collect air quality data and share real-time data. Our community partners will empower the community with fact-based information to reduce the impact of traffic pollutants, especially disproportionate impacts on low-income communities and communities of color. Engaging the community in all aspects of the project through data access and dissemination; selecting monitoring station locations; education on air quality, air monitoring, and health impacts of air pollution; as well as opportunities to get involved in planning, outreach, and decision-making will build community capacity. With this capacity, the communities will have the knowledge and resources to sustain a community-led air quality monitoring network and to improve their community's air quality and, thus, their health.

The TPO and our partners will disseminate data, conduct outreach, and offer educational and training opportunities that engage the community in multiple ways to reach diverse audiences. We identified various forms of community engagement:

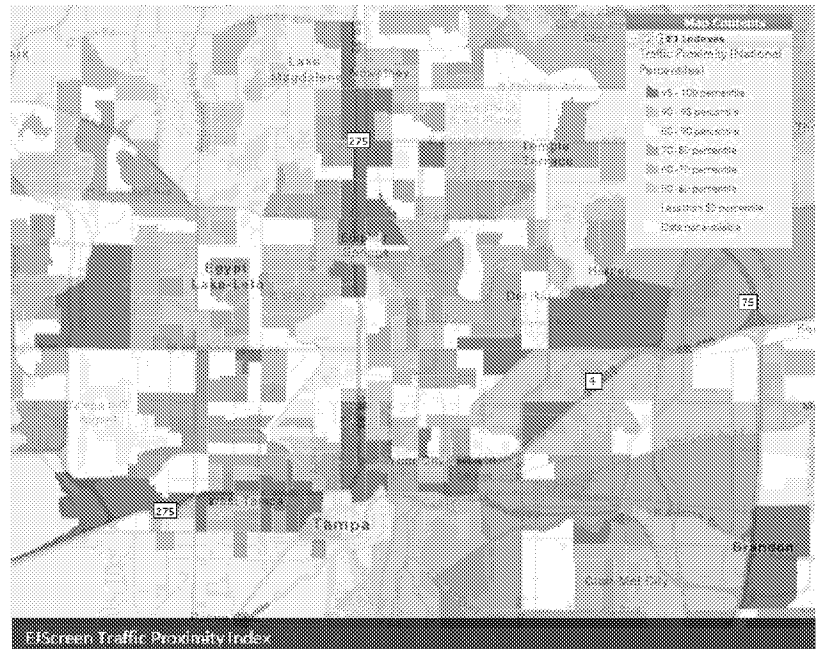
- Community Air Quality Coalition (the coalition): The TPO will establish a Community Air Quality Coalition, modeled after the Community Steering Committee for Identifying Violations Affecting Neighborhoods (IVAN) Air Community Monitoring Network in Imperial County, CA. The coalition will be open to community leaders, advocates, youth, representatives from community-based organizations, interested residents, local government agencies, and academic institutions. The coalition will meet quarterly, provide guidance and decision-making on the network, develop goals for community air monitoring, identify monitoring areas; participate in the network implementation; and evaluate the project with recommendations for improvements.
- Data dissemination and outreach will take the form of:
 - Informational displays installed at monitoring stations
 - A project website
 - Annual summits planned with the coalition and Community Consultant
 - Annual project reports and presentations

- Quarterly presentations and outreach events
- Community celebrations, launch events, and media engagements
- Education to engage the community will take the form of:
 - A guidebook for current and future monitoring site hosts and interested organizations and citizens, modeled after the IVAN Air Guidebook for Developing a Community Air Monitoring Network
 - Volunteer and internship opportunities through the Tampa Heights Junior Civic Association to assist with youth engagement through their integrated community programs
 - Research Experience for Teachers will give primary school teachers a chance to study air quality with USF researchers to apply to a curriculum
- Youth Education will take the form of:
 - USF with assistance of Tampa Heights Junior Civic Association and area schoolteachers, will develop a primary school education curriculum
 - Include the community air quality monitoring network into the TPO's Future Leaders in Planning (FLiP) and FLiP Junior youth programs
- Data dissemination
 - Real-time data results from analyses conducted using the air monitoring data
 - TPO supported project website
 - Publications and presentations
 - Utilize community celebrations, launch events, and media engagements to explain and disseminate data
- Training
 - Train-the-trainer for outreach events
 - Train-the-trainer for technical tasks and analysis

Section 3: Environmental Justice and Underserved Communities

The Executive Order on Environmental Justice tasks agencies receiving Federal funding to consider the social, cultural, environmental, and health impacts of their plans and projects on low-income and minority communities. The Hillsborough TPO and its partners are committed to recognizing and documenting the ways in which racism and discrimination impacted and continue to impact low-income and minority individuals and communities. They actively prioritize projects and plans which seek to overcome the impacts of these legacies.

The EJScreen Traffic Proximity Index, which considers proximity to high volume roads and the percentage of low-income populations and people of color, shows that communities that border I-275 and I-4 are over the 90th percentile of the Traffic Proximity Index, as compared to the US. Air pollution is a major challenge and cause of mortality in EJ communities; low-income and minority communities are disproportionately burdened by harmful environmental impacts because of historical racism in zoning, land-use, and transportation planning decisions. The TPO's *State of the System Report 2021* also found 27.35% of Hillsborough County's total population lives within 300 meters of a high-volume road (>30,000 Average Daily Trips), a 7% increase since 2018. In comparison, 37.21% of Communities of Concern live within 300 meters of a high-volume road, an increase of 14% since 2018.



This proposed project prioritizes air quality monitor installations based on traffic proximity, areas with higher percentages of at-risk populations (e.g., schools), and communities disproportionately burdened by TRAP. This project will provide resources to empower these communities by prioritizing air monitors in EJ and historically impacted neighborhoods. Engaging community organizations and schools in the process of developing a community monitoring network and the process of public engagement will help ensure this project provides appropriate resources to build capacity. Empowering the community to sustain the network, collaborate with one another, and educate other interested individuals and organizations will take various forms, such as the community coalition and the guidebook for monitoring site hosts. Resources, empowerment, and self-sufficiency will improve the community's capacity to meaningfully participate in the community air monitoring network as well as decision making related to transportation projects and plans.

Section 4: Environmental Results – Outputs, Outcomes and Performance

A. Expected Project Outputs & Outcomes

Outputs include, but are not limited to:

- Characterization of air pollution levels in underserved communities near I275/I4 corridors
- Community-specific assessments of air pollution data to be used to influence future transportation and planning projects
- Deployment of equipment to conduct air quality monitoring in or near underserved communities.
- Near real-time air quality data availability for communities and other stakeholders
- Promotion of partnerships and community involvement through various activities and information exchanges.

Short-term Outcomes: (chg. in knowledge) Through the community outreach, the people in the communities of concern will have an increased awareness and understanding of the impact of vehicle emissions to their health and community. They will understand how to measure the pollutants, so they have the data they need to assist with fact-based information for future planning decisions and ways to decrease pollutants caused by vehicles along this corridor.

Intermediate Outcomes (chg. in behavior) Through the data collected by the air quality monitors, the Community Air Quality Coalition (the coalition) will host a community network annual summit where data is shared, and actionable items are discussed that will either decrease the current vehicular pollutants or influence future planning decisions to ensure that all future projects mitigate vehicular pollutants entering the neighborhood.

Long-term Outcomes: (chg. in conditions) The impact of the coalition and distributed air quality network will establish an ongoing collaboration with city and county planners to initiate air pollutant mitigation strategies along the project corridor. The community will be empowered to influence future development and have real impact of data-driven solutions to pollutants within their communities. This may be measured by counting the number of active, new air-monitoring community organizations and the connected network (which did not exist prior to the project), number of annual workshops with suggestions for future development and longer term is the measurable reduction in pollutants by the determined community-driven percentage. Future studies could investigate health impacts from the pollutants tracked in the community and with base-line information of respiratory illness from these areas before the project and after mitigating strategies are established.

B. Performance Measures and Plan

Year	Measure	Plan
1	Air monitor procurement for community and co-location sites.	TPO to procure and assist partners and community members selecting location for deployment
	Co-locate monitors with two EPC Regulatory Air Monitoring Sites	EPC regular reporting on co-located monitors
	Collect and analyze data at the co-location sites & calibrate monitors based on the co-located air quality data.	USF and EPC regular reporting to TPO
	Conduct public outreach and engagement to raise awareness of project & how to be involved.	TPO to work with consultants and partners to educate community on benefits of having community-specific air pollution data
	15-20 community sites identified where air monitoring station will be installed	Coordinate with THCA to provide outreach to engage add'l sites, including informational displays, and signage
	Create a youth education curriculum to build interest in STEM fields & expand air quality education & training guidebook for community members/ organizations on hosting a monitoring station or assist with monitoring and outreach.	USF, partners, and primary school teachers will create the curriculum and guidebook to engage and build community interest in the project and ultimately build community capacity to influence future development within their community.
	Community Air Quality Coalition (the coalition)	Through partners and outreach, a coalition will be formed to continue engagement, provide education and training to the community. Quarterly meetings and annual summit will be organized.

2 - 3	Air Quality data analysis	USF will collect air quality data w/ the communities. Researchers will analyze & report pollutant levels experienced w/ the communities quarterly & continue to evaluate the co-located monitors.
	Implement Youth curriculum, trainings & distribute guidebook	Outreach events and presentations will occur quarterly at monitoring stations and in coordination with other community events.
2-3	Annual Summit	To continue community engagement, education and data sharing.
3	Public engagement and data analysis continues and transitions to community led initiative	The now formed Community Air Quality Coalition identifies a community lead to take this role
	Distributed Air Quality Monitoring for Disadvantaged Communities Along IO-275/I-4 Corridor report/presentation	TPO, Partners and community partners will develop a final report to be used to assist community members in influencing future development within their community.
	Sustain grassroots Air Quality Coalition	TPO to assist with identifying funding to sustain the coalition and network into the future

C. Timeline and Milestones

Hillsborough Fiscal Years July1 - June 30	Timeline															
	Jul - Dec				Jan - Jun				Jul - Dec				Jan - Jun			
Milestones	FY23	Q1	Q2	Q3	Q4	FY24	Q1	Q2	Q3	Q4	FY25	Q1	Q2	Q3	Q4	
Develop and maintain the project website		X	X	X	X		X	X	X	X		X	X	X	X	
Procure Air Quality Monitors		X	X	X	X					X						
Hire Consultant to coordinate Annual Regional Summit, outreach, & develop a coalition with the communities		X	X	X												
E-newsletter articles and social media posts		X	X	X	X		X	X	X	X		X	X	X	X	
Public outreach workshops and events		X	X	X	X		X	X	X	X		X	X	X	X	
Outreach to K-12 science teachers		X	X													
Develop youth education curriculum				X	X		X									
Engage youth in air quality monitoring to promote careers in STEM field.				X	X		X	X	X	X		X	X	X	X	
Develop guidebook for community monitoring site hosts		X	X	X	X		X	X								
Develop informational displays for distributed monitoring stations				X	X		X	X								
Recruit organizations to host distributed community monitoring stations		X	X	X	X											
Co-locate monitors at EPA Regulatory Monitoring Site		X														
Install community monitoring stations							X	X	X	X		X	X	X	X	
Capacity building training for community site hosts							X	X	X	X		X	X	X	X	
Collect and analyze data from monitors		X	X	X	X		X	X	X	X		X	X	X	X	
Annual Regional Summit					X				X							
Quarterly grant reporting		X	X	X	X		X	X	X	X		X	X	X	X	
Annual report and presentation					X				X						X	
Identify Community Lead													X			
Project Evaluation																X

Section 5: Quality Assurance Statement: Submitted in Optional Attachments

Section 6: Programmatic Capability and Past Performance

A. Past Performance

Hillsborough Transportation Planning Organization (TPO): As the transportation policy-making board mandated by federal and state law, the TPO is responsible for ensuring federal and state dollars are spent on existing and future transportation projects and programs are based on a continuing, cooperative, and comprehensive transportation planning process. Staff manages a bi-annual agency work program of over \$3M and prioritized \$600M in 2022 in for transportation projects in Hillsborough County through its Transportation Improvement Program. The TPO's work program is primarily supported by Federal Highway Administration (FHWA), Federal Transit Administration, the FL Commission for the Transportation Disadvantaged as well as some discretionary grants.

Hillsborough Environmental Protection Commission (EPC): has a successful record managing several EPA funded grants and programs as well and has been a critical partner for both the Pilot study on Low-Cost Air Quality Monitors and this project. Their record of successful EPA grant management is one reason

why the TPO has partnered with them to assist with the program. Their EPA funded grants include Section 105: address and maintain compliance with the primary and secondary NAAQS (National Ambient Air Quality Standards) of the CAA. Currently, EPC is establishing a new Photochemical Assessment Monitoring Station, one of only two in the state. PM2.5Section 103: collects data on ambient air concentrations of fine particulate matter (PM2.5) and its precursors. NATTS: National Ambient Air Toxic Trends Station (NATTS) program develops long-term HAP monitoring data of consistent quality.

University of South Florida: USF receives numerous grants and has manages many projects throughout the Tampa Bay area. The TPO has partnered with USF regularly to provide for two fellowships annually as well as partnered on the Pilot program on Low-Cost Air Quality Monitors. Other relevant projects and grants under their umbrella include Air pollution and equity impacts of the proposed Tampa Bay Next program from a Health in all Policies perspective, a project under UTC: Center for Transportation, Environment, and Community Health (CTECH). U.S. Dept. of Transportation and National Science Foundation and USDOT grants.

B. Reporting Requirements

The TPO is annually certified to assure compliance with federal and state reporting requirements. This is demonstrated with continuous compliance and approved certifications under the current Executive Director for the past seven years. Quarterly reporting is also required of FTA and FHWA grants demonstrating due diligence with grant funds as well as project progress. Work programs are submitted and approved by the TPO Board, FDOT, FHWA and FTA and reviewed periodically. Funds are managed and reported on all reports including an annual report.

EPA: Depending on the grant, internal and external audits identify and outline for improvement of the programs. This includes monitoring equipment and procedure evaluation and reporting to comply with state and federal requirements. EPC also adheres to the State of Florida's Quality Management Plan (QMP). They additionally participate in EPA, and State Performance They submit an annual workplan and report annually to EPA. Evaluation Programs and Quarterly Audits, Laboratory Proficiency Testing, Ambient Air Monitoring Quality Assurance Project Plans (QAPP), and Standard Operating Procedures. Most of the grants also include an annual performance report, submitted workplan, and reported accomplishments and program activities.

C. Staff Expertise

The TPO has gathered a strong project team that balances expertise in land use & transportation planning, research and engineering, regulatory compliance, project management and community leadership. The lead applicant Hillsborough Transportation Planning Organization (TPO) has over 18 years of experience in project and grants management. The University of South Florida (USF) Team is led by a full professor and post doctorate student with civil engineering, chemical engineering, air quality, and public health expertise. The Environmental Protection (EPC) team is headed by the Air Monitoring Section Chief and professional engineer who manages the largest local monitoring network in the state to measure the air quality in Hillsborough County. Finally, the Tampa Heights Junior Civic Association (THJCA) provides youth opportunities for civic engagement, leadership, and community involvement. Thousands of youths, families, individuals have participated over the years and THJCA has led many projects on transportation and represents equitable decisions for neighborhoods, community gardens

and food access. The THJCA has demonstrated their ability to engage the community and build capacity in Hillsborough County.

Section 7: Budget

A. Budget Detail

Hillsborough Transportation Organization believes in the project and will supplement additional project time as needed with TPO funds. Fringe, travel, and supplies are detailed within the budget table and items that may benefit from additional detail are listed below.

Contractual: Consultants will be utilized to assist the TPO and our Community Consultant to provide capacity and expertise in community outreach and developing, organizing, and providing follow up for the annual summit

Other: subaward costs are associated with the project partners which details are provided under reasonableness of costs.

Hillsborough County Transportation Planning Organization Budget Table	
Line Item & Itemized Cost	EPA Funding**
Personnel	
(1) Project Manager @ \$44/hr X5/hr/wk X 52 wks	\$ 11,440.00
(2) Project Staff @\$27/hr X15 hrs./wk X 52	\$ 14,040.00
(3) Staff 2 @ \$37/hr X 10 X 39 (13 wks per yr)	\$ 13,338.00
TOTAL PERSONNEL	\$ 38,818.00
Fringe Benefits	
34% of salary and Wages @ 34% x Total Personnel - Retirement, Health Benefits, FICA, SUI	\$ 13,198.12
TOTAL FRINGE BENEFITS	\$ 13,198.12
Travel	
Mileage for PM: 12 miles/wk@ \$.58.5/mi X 156 weeks	\$ 1,095.12
Mileage for staff: 25 miles/wk@ \$.58.5/mi X 156 weeks	\$ 2,281.50
Conferences	\$ 5,000.00
TOTAL TRAVEL	\$ 8,376.62
Equipment	
X number of whatevers @\$5000+ per unit	
TOTAL EQUIPMENT	\$ -
Supplies	
Outreach materials & Supplies	\$ 2,000.00
23 Air Quality Monitors Ex.(23@\$300 per unit)	\$ 6,900.00
7 Multi-pollutant Air Quality Monitors Ex.(6@\$1200 per pkg unit * 3)	\$ 25,200.00
TOTAL SUPPLIES	\$ 34,100.00
Contractual	
Consultant Services	\$ 50,000.00
TOTAL CONTRACTUAL	\$ 50,000.00
Other	
Subaward costs	\$ -
Partner 1 (USF)	\$ 100,000.00
Partner 2(EPC)*	\$ -
Partner 3 (Community Consultant)	\$ 30,000.00
Community Network agencies: (20-Entities)	\$ 60,000.00
Community Meeting Logistics	\$ -
Outreach Software services	\$ 5,000.00
Service/Maintenance (May substitute solar panels & Mi-Fi where needed (\$50per mo*36 mos*30 locations)	\$ 45,500.00
TOTAL OTHER	\$ 241,500.00
Indirect Charges	
De minimis is 10%X Personnel = Indirect Costs	\$ 3,881.80
TOTAL INDIRECT	\$ 3,881.80
TOTAL FUNDING	\$ 389,874.54
TOTAL PROJECT COST	\$ 389,875.00

B. Reasonableness of Costs

The team the TPO has gathered will provide a strong project and the costs associated with the above Budget Table are assigned to the deliverables organized by partner below.

Hillsborough Transportation Planning Organization (TPO) Deliverables	
Overall project management	Presentations to community groups
Project website	Procure Air Quality Monitors and equipment
E-newsletters and social media posts	Assist with curriculum development & apply to community planning events
Assist with outreach to science teachers	Grant reporting requirements
TPO Consultant Deliverables	
Utilizing information from the partners, assist with organizing outreach events and provide participation data form each	Assist with development, organization, and associated tasks with annual Air Quality Summit
University South Florida (USF) Deliverables: Technical, Scientific & Curriculum Lead	
Set up & maintain distributed community monitor stations at community-hosted sites	Assist with training the community host sites on distributed community monitor stations & develop capacity for community to maintain sites
Collect and analyze data from monitors	Work with teachers to develop youth education curriculum with elementary/middle school teachers
Provide quarterly reporting	Annual report (each of 3 years)
Provide speaker at quarterly meetings & for annual summit	Develop guidebook for community monitoring site hosts
Project evaluation	
Hillsborough County Environmental Protection Commission (EPC): Technical & Scientific Assistant*	
Deliverables	
Assist with training community of distributed community monitor stations	Co-locate monitors at regulatory sites for data analysis
Technical assistance with data interpretation, and community host sites	Provide speaker for annual summit & meetings
Coordinate outreach at existing EPC events	Assist with guidebook for community monitoring host sites & youth education curriculum
Tampa Heights Junior Civic Association (THJCA) Deliverables: Community Consultant	
Community Outreach Event Host. Assist with annual summit (each of 3 years), including arranging facilities & program /speakers	Recruit a minimum of 16 network community monitor host sites within first year
Assist with curriculum development & apply to community planning events	Engage youth in air quality monitoring to promote careers in STEM field
Community Host Site Deliverables	
Distribute information about & attend workshops & annual summit	Host & provide public access to distributed community monitor stations
Assist with curriculum development & apply to community planning events	

*EPC Deliverables are provided voluntarily as they are being provided as part of their work programs.

C. Expenditure of Awarded Funds

The TPO has extensive experience working with multiple partners to expend grant funds in a timely and efficient manner. This includes the Pilot Low-Cost Air Quality Monitoring Program in which some of the existing partners are included. Agreements and/or MOU's will be completed with specific scopes of work and payment schedules that coincide with grant distributions. Milestones will be monitored by TPO staff and reported to EPA on a designated schedule. The TPO has established controls for receipt of payment, reporting, monitoring, and invoicing.

Section 6 – Optional Attachments Included in Packet:

- Quality Assurance Statement
- Partnership and Letters of Support
- Resume of Project Manager and Other Key People

Thank you for your consideration